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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,495	11/27/2001	Doug Rollins	M4065.0486/P486	8165
24998 7590 01/08/2008 DICKSTEIN SHAPIRO LLP 1825 EYE STREET NW Washington, DC 20006-5403			EXAMINER GELAGAY, SHEWAYE	
			ART UNIT 2137	PAPER NUMBER
			MAIL DATE 01/08/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/993,495

Applicant(s)

ROLLINS, DOUG

Examiner

Shewaye Gelagay

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 14-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 14-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to Applicant's amendment filed on October 10, 2007. Claim 1 has been amended. Claims 1-12 and 14-26 are pending.

Response to Arguments

2. Applicant's arguments filed October 10, 2007 have been fully considered but they are not persuasive. In response to the applicant's arguments the following comments are made:

The applicant argued that Serceki is essentially a method of transferring information between two computers system that are not physically connected by using a storage device as conduit between the two systems, e.g., a "wireless" and a "wired portion of a network." Thus, in the invention Serceki, a storage device is used to transfer data, e.g., configuration information or security keys, between the two systems. The examiner would like to point out that Serceki teaches a device with a memory for distributing security keys for encryption system whose purpose is to secure communication in a wireless network. In addition, Serceki further discloses a user is provided with a network device for physically exchanging encryption keys in a wireless network and network administrators create the device. (Abstract; page 1, paragraph 8, page 3, paragraph 32) Furthermore, Serceki teaches the network device can begin downloading updated keys at a company that may have several stations located through out the office space. (page 4, paragraphs 41-45) which is adequate to meet all

the claimed limitations except "accessing said new encryption key on said network communication during an encrypted communication"

The applicant argued that Linkola fails to disclose "accessing said encryption key on said network communication during an encrypted communication", and also fails to disclose an "encryption key on said network device." Linkola teaches an apparatus that can be used to readily change the data in SIM and thereby implement flexible maintenance and control of the module. Linkola teaches a SIM which contains an identity code and a secret key and the secret key is the subscriber's secret key used for encryption of radio communication and for authentication of the mobile station. (col. 2, lines 1-63; col. 5, lines 10-17) Therefore, Linkola teaches accessing encryption key (i.e. secret key) on said network communication (i.e. SIM) during an encrypted communication (i.e. encryption of radio communication and authentication of the mobile station)

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Serceki teaches a device with a memory for distributing security keys for encryption system whose purpose is to secure communication in a wireless network. (Abstract) Linkola teaches a

SIM which contains an identity code and a secret key and the secret key is the subscriber's secret key used for encryption of radio communication and for authentication of the mobile station. (col. 2, lines 1-63; col. 5, lines 10-17) One ordinary skill in the art at the time the invention was made would have been motivated to modify the system disclosed by Serceki with Linkola in order to prevent unauthorized access to the encryption key by keeping it in a secure device.

The applicant argued that Campbell and Triege fail to teach "accessing said encryption key on said network communication device during an encrypted communication". The examiner would like to point both references have not been used to teach that particular limitation.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 6-8, 14-20 and 26 rejected under 35 U.S.C. 103(a) as being unpatentable over Serceki et al. (hereinafter Serceki) U.S. Publication Number 2003/0078072 in view of Linkola et al. (hereinafter Linkola) U.S. Patent Number 6,934,391

As per claim 1:

Serceki teaches a method of updating and using an encryption key used by a wireless station for encrypted communications with a wired portion of the network, said method comprising:

physically separating from said wireless station a network communications device; (Page 4, paragraphs 42-44)

physically connecting said removed network communications device to an encryption key updating device which is connected to a wired portion of said network said wired portion of said network containing an encryption key generator for providing a new encryption key to said updating device; (Page 3, paragraphs 32-33; page 4, paragraph 41)

replacing an existing encryption key in said network communications device with a new encryption key from said generator sent over said wired portion of said network; (Page 3, paragraph 33 and 35; Page 4, paragraph 43)

physically reconnecting said network communications device containing said new encryption key with said wireless station of said network. (Page 3, paragraphs 33, 35; Page 4, paragraph 43) and

accessing said encryption key during an encrypted communication. (Abstract; ... *distribute security keys for encryption system whose purpose is to secure communication in a wireless network*)

In addition, Serceki further discloses a user is provided with a network device for physically exchanging encryption keys in a wireless network and network administrators create the device. (page 1, paragraph 8, page 3, paragraph 32) Furthermore, Serceki

teaches the network device can begin downloading updated keys at a company that may have several stations located through out the office space. (page 4, paragraphs 41-45)

Serceki does not explicitly disclose accessing the encryption key on said network device during an encrypted communication. Linkola in analogous art, however, discloses accessing the encryption key on said network device during an encrypted communication. (Abstract; col. 5, lines 1-39; col. 6, lines 34-67) Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Serceki with Linkola in order to provide a mobile station connected to a subscriber identity module (SIM) for use by a subscriber in effecting mobile communications through the data communications system. (Abstract; Linkola)

As per claims 6-7, 14, 16 and 26:

The combination of Serceki and Linkola teaches all the subject matter as discussed above. In addition, Serceki further discloses a method wherein said network communications device is configured on a plug-in card and is physically connection to said network by inserting said network communications device into a card tray at said updating device. (Page 3, paragraph 31)

As per claims 8 and 15:

Serceki teaches a network comprising:

a wired station connected to a wired network, (Page 4, paragraph 41) said wired station comprising:

an encryption key generator for generating an encryption key; (Page 3, paragraphs 32-33; page 4, paragraph 41)

a network communication device for transmitting said encryption key over said wired network; (Page 3, paragraph 31) and

a wired encryption key updating device connected to said wired network; (Page 3, paragraphs 32-33; page 4, paragraph 41)

a wireless station configured to be wirelessly connected to said network and to communicate with said wired network through communications encrypted with an encryption key, (Page 4, paragraphs 42- 44) said wireless station comprising:

a wireless network communication device containing an encryption key, being physically disconnectable from said wireless station and physically connectable said wired encryption key updating device wired to said network to receive and store as a new encryption key which is configured to be transmitted over said wired network by said wired network communications device. (Page 3, paragraph 33 and 35; Page 4, paragraph 43)

In addition, Serceki further discloses a user is provided with a network device for physically exchanging encryption keys in a wireless network and network administrators create the device. (page 1, paragraph 8, page 3, paragraph 32) Furthermore, Serceki teaches the network device can begin downloading updated keys at a company that may have several stations located through out the office space. (page 4, paragraphs 41-45)

Serceki does not explicitly disclose accessing the encryption key on said network device during an encrypted communication. Linkola in analogous art, however, discloses accessing the encryption key on said network device during an encrypted communication. (Abstract; col. 5, lines 1-39; col. 6, lines 34-67) Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Serceki with Linkola in order to provide a mobile station connected to a subscriber identity module (SIM) for use by a subscriber in effecting mobile communications through the data communications system. (Abstract; Linkola)

As per claim 17:

Serceki teaches a wireless network communications device comprising:

A removable wireless communications network card adapted to be physically connected to and disconnected from a wireless station card interface; (Figure 3)

a storage area said network card which stores an updateable encryption key for use in conducting encrypted wireless network communications, (Figure 3, item 325) said encryption key being updateable when said card is connected to a wired network card interface which supplies a new encryption key. (Page 3, paragraph 33 and 35; Page 4, paragraph 42-43)

In addition, Serceki further discloses a user is provided with a network device for physically exchanging encryption keys in a wireless network and network administrators create the device. (page 1, paragraph 8, page 3, paragraph 32) Furthermore, Serceki teaches the network device can begin downloading updated keys at a company that

may have several stations located through out the office space. (page 4, paragraphs 41-45)

In addition, Serceki further discloses a user is provided with a network device for physically exchanging encryption keys in a wireless network and network administrators create the device. (page 1, paragraph 8, page 3, paragraph 32) Furthermore, Serceki teaches the network device can begin downloading updated keys at a company that may have several stations located through out the office space. (page 4, paragraphs 41-45)

Serceki does not explicitly disclose accessing the encryption key on said network device during an encrypted communication. Linkola in analogous art, however, discloses accessing the encryption key on said network device during an encrypted communication. (Abstract; (col. 5, lines 1-39; col. 6, lines 34-67) Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Serceki with Linkola in order to provide a mobile station connected to a subscriber identity module (SIM) for use by a subscriber in effecting mobile communications through the data communications system. (Abstract; Linkola)

As per claims 18 and 19:

The combination of Serceki and Linkola teaches all the subject matter as discussed above. In addition, Serceki further discloses a method wherein card interface for providing a new encryption key is a PCMCIA card interface. (Page 3, paragraphs 31-32)

As per claim 20:

Serceki teaches an encryption key programming system comprising:

an encryption key generator connected to a wired network; (Page 3, paragraphs 32-33; page 4, paragraph 41)

a programming device connected to said wired network for receiving over a wire connection an encryption key from said generator, said programming device being adapted to physically receive a wireless network communications device containing an updatable encryption key and storing said received encryption key in said wireless network communications device. (Page 3, paragraph 31-35; Page 4, paragraph 42-43)

In addition, Serceki further discloses a user is provided with a network device for physically exchanging encryption keys in a wireless network and network administrators create the device. (page 1, paragraph 8, page 3, paragraph 32) Furthermore, Serceki teaches the network device can begin downloading updated keys at a company that may have several stations located through out the office space. (page 4, paragraphs 41-45)

Serceki does not explicitly disclose accessing the encryption key on said network device during an encrypted communication. Linkola in analogous art, however, discloses accessing the encryption key on said network device during an encrypted communication. (Abstract; (col. 5, lines 1-39; col. 6, lines 34-67) Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Serceki with Linkola in order to provide a mobile station connected to a subscriber identity module (SIM) for use by a subscriber

in effecting mobile communications through the data communications system. (Abstract; Linkola)

2. Claims 2-3, 9-10 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Serceki et al. (hereinafter Serceki) U.S. Publication Number 2003/0078072 in view of Linkola et al. (hereinafter Linkola) U.S. Patent Number 6,934,391 and in view of Campbell, Jr. U.S. Patent 4,369,332.

As per claims 2-3, 9-10 and 21-23:

The combination of Serceki and Linkola teaches all the subject matter as discussed above. In addition, Serceki further discloses a network administrator decides to change security keys depending on internal policies at a regular intervals or after detecting a security breach. (Page 3, paragraph 41) Both references do not explicitly disclose a method wherein said new encryption key is generated at user-defined intervals or on user-specified days. Campbell in analogous art, however, discloses a method wherein said new encryption key is generated at user-defined intervals or on user-specified days. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Serceki and Linkola with Campbell in order to provide a measure of added security for encryption keys while providing high level of convenience for users. (Page 1, paragraph 2 and 6; Serceki)

3. Claims 4-5, 11-12, 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Serceki et al. (hereinafter Serceki) U.S. Publication Number

2003/0078072 in view of Linkola et al. (hereinafter Linkola) U.S. Patent Number 6,934,391 and in view of Triege United States Letter Patent Number 6,226,750.

As per claims 4, 11 and 24:

The combination of Serceki and Linkola teaches all the subject matter as discussed above. Both references do not explicitly disclose a method wherein said key generator generates a first new encryption key; compares said new encryption key to the previous k encryption keys used in said network; and generates a second new encryption key if said first new encryption key matches any of said k previously used encryption keys.

Triege in analogous art, however, discloses a method wherein said key generator generates a first new encryption key; (Col. 11, lines 30-32) compares said new encryption key to the previous k encryption keys used in said network; (Col. 11, lines 39-41) and generates a second new encryption key if said first new encryption key matches any of said k previously used encryption keys. (Col. 11, lines 38-43)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Serceki and Lewis to include wherein said key generator generates a first new encryption key; compares said new encryption key to the previous k encryption keys used in said network; and generates a second new encryption key if said first new encryption key matches any of said k previously used encryption keys. This modification would have been obvious because a person having ordinary skill in the art would have been

motivated to do so, as suggested by, Triegeer (Col. 11, lines 38-39) in order to ensure the previous key is not reused.

As per claims 5, 12 and 25:

The combination of Serceki, Linkola and Triegeer teaches all the subject matter as discussed above. In addition, Triegeer further discloses a method wherein *k* is a user-defined number of previously used encryption keys. (Col. 11, lines 38-43)

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shewaye Gelagay whose telephone number is 571-272-4219. The examiner can normally be reached on 8:00 am to 5:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Shewaye Gelagay



EMMANUEL L. MOISE
SUPERVISORY PATENT EXAMINER